



**THIS IS A REQUEST FOR INFORMATION (RFI) ONLY.** Any and all information requested in response to this RFI is for **Market Research purposes only**. In accordance with FAR 15.201(e), responses to this notice are not offers and cannot be accepted by the Government to form a binding contract. The Government is under no obligation to issue a solicitation or to award any contract on the basis of this RFI. All costs associated with responding to this RFI will be the sole responsibility of the contractor. All submissions to this RFI will be treated as business confidential materials, become Government property, and will not be returned.

The Department of Veterans Affairs (VA) Office of Information Technology (OIT) requires market research for the Next Generation Content Distribution Network (CDN) infrastructure currently in place. The objective is to identify solutions to upgrade or replace the current CDN system.

Based on the responses to this RFI, the government may issue a Request for Proposals (RFP) at an undetermined time in the future, estimated in Fiscal Year (FY) 14 or early FY 15. Information submitted in response to this RFI will be used confidentially by VA for the CDN project.

The three major components to CDN are described below in sections 1.1 thru 1.3 below. The current VA CDN system is described below in Section 2.

**1. REQUIREMENTS:**

**1.1 DELIVERY OF ON-DEMAND CDN VIDEOS**

The contractor will provide their proposed solution for upgrading or replacing the VA's current CDN system capability (described in Section 2) to distribute on-demand media content across VA network to employee desktops. The response should include as much relevant detail as possible so it can be thoroughly evaluated by VA. This solution could be:

- a. A full hardware upgrade of the current CDN Cisco Application and Content Networking System (ACNS) distribution platform to a newer hardware/software platform in which the equipment would continue to be owned/leased and maintained by the VA. This does not have to be a one-to-one replacement of the current CDN edge storage devices since there may be a more efficient way to reposition CDN content across the VA.
- b. A full hardware upgrade of the current CDN Cisco ACNS distribution platform to a newer hardware/software platform in which the equipment would be owned and maintained by the vendor. This does not have to be a one-to-one replacement of



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the current CDN edge storage devices since there may be a more efficient way to reposition CDN content across the VA.

- c. A complete replacement of the current CDN with a distribution service in which the VA provides the on-demand media content and the vendor does the rest. The service can be scalable or for a fixed amount of content.
- d. A combination of the approaches above.

The on-demand video (media content) solution must:

- a. Be able to continue to utilize the Veterans Affairs Knowledge Network (VAKN) satellite network for distributing media content from the central uplink facility to VA Local Area Networks (LAN).
- b. Include a rough order of magnitude cost estimate
- c. Include an estimated time line for implementation
- d. Include the capability to delivery on-demand media to all VA employees inside VA intranet (full multi-media desktops or thin clients), outside of VA network, or utilizing mobile devices.

### **1.2 DELIVERY OF LIVE VAKN BROADCASTS**

The contractor will provide their proposed solution for upgrading or replacing the VA's current CDN system capability (described in Section 2) to delivery live VAKN broadcasts across VA to employee desktops. The response should include as much relevant detail as possible so it can be thoroughly evaluated by VA.

The live VAKN broadcast solution must:

- a. Be able to continue to utilize the VAKN satellite network for distributing the live broadcast streams from the central uplink facility to VA LANs.
- b. Comply with VA Section 508 requirements (Closed Captioning, etc.).
- c. Include a rough order of magnitude cost estimate
- d. Include an estimated time line for implementation



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- e. Include the capability for the delivery of live VAKN broadcasts (streaming video) to all VA employees inside VA intranet (full multi-media desktops or thin clients), outside of VA network, or utilizing mobile devices.

### 1.3 CDN WEB PORTAL

The contractor will provide their proposed solution for replacing the current CDN custom web application (described in Section 2) with a web portal which can host both on-demand media and live VAKN broadcasts.

This solution must:

- a. Include a rough order of magnitude cost estimate
- b. Comply with VA Section 508 requirements
- c. Include an estimated time line for implementation
- d. Support the capability of launching individual on-demand videos from a launch string that can be hosted on another web site such as the Talent Management System (TMS).
- e. Be accessible to VA employees on VA intranet, outside of VA network, or utilizing mobile devices.

The specific functionality requirements for the web portal are outlined in the table below.

Access	Description
1. VA Internal	Videos available to VA intranet users (inside Firewall)
2. VA External	Videos available to VA users with external server delivery (not Virtual Private Network (VPN))
3. VA Public - Mobile	Videos available to authenticated VA users via public mobile devices (iPods, iPads, etc.)
4. Public	Selected Videos available to the general public Note: A few videos such as "The American Veteran" will be released to the public via other delivery mechanisms.
Video Type	Description
5. On Demand	Static videos which can be played at any time.



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6. Live – VAKN Channels	Live streaming of VAKN channel broadcasts including live events for limited audiences (Veterans Benefit Administration (VBA) only, one Veterans Integrated Service Network (VISN), etc.).
<b>General Functionality – On Demand Videos</b>	
<b>Description</b>	
7. Section 508 compliant video player	Video player shall be Section 508 compliant.
8. Rich Text / HTML editor	Administrator/Owner can edit all content (text, images, links etc.) appearing with the video
9. Closed Caption/Switch	All videos are closed captioned which users can turn on or off.
10. Standard video player controls	Users have all standard video player controls (pause, bookmarking, restart, fast forward, skip ahead, etc.) (Employees will be trusted to complete training- honor system)
11. TMS Integration	Full TMS integration. All VOD videos will be launched from TMS, there is single sign-on (pass through authentication), and TMS completions are recorded. (VA Directive 0004)
<b>General Functionality - Web Portal</b>	
<b>Description</b>	
12. Usage Reports	Administrators can generate customizable usage reports for all videos played.
13. Upload videos	Authorized users can upload videos
14. Multiple file formats	Supports multiple video file formats including Windows Media Player, Flash, MP4, and Mobile formats
15. Featured Programs - manual	Programs can be marked as "featured" by administrators and made more visible to users (latest news, mandatory programs, etc.)
16. Embedding	Users can embed links to the videos on their websites.
17. Frequently Programs - automatic	The most frequently watched programs are automatically elevated to a featured program.
18. Share Program Link via Email	Users can share a link to the video program with others via email.
19. Program Reminders – Text Message	Users can create and automatically receive reminders for viewing a program (live or on-demand) on their cellular phones in the form of simple text message.
20. Browsing	Users will be able to scroll through program listing for each category or content library.
21. Program Rating	This allows users to rate a video program on a scale of 1 to 5 stars based on their personal liking.
22. View Program Description/Rating	Users will be able to view description of a program by clicking on its icon. They will also be able to view average "rating" of that program.
23. Program Comments	This allows users to provide their personal comments on a video program which will be shared with relevant groups as user feedback.
24. Content Libraries	Administrators have the ability to group programs into content



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	libraries (VBA, VISN 15, etc.) and limit access only to those groups.
25. Content Administration	Administrators have an intuitive user interface to maintain the video libraries. It should include the ability to easily search, manipulate, and remove videos. It should also allow automated e-mail notifications to be setup which are triggered by certain events such as when videos are set to expire.
26. Categories	Videos can be setup in categories and users can search an individual category or all videos.
27. Customizable home page	Users will have access to a customizable home page allowing them to add and change its contents based on their personal preferences.
28. My Viewing History	A user can access their personal viewing history.
29. Exporting Reports	Users can export their viewing history report in a simpler printer-friendly format and print it.
30. My Recent Searches	This will allow users to view a quick list of search keywords provided by that user to perform those searches again.
31. Tag Cloud	A Tag Cloud is a collection of all keywords (tags) to define different programs. This allows users to quickly search relevant programs based a tag.
32. My Resources	Users will be able to maintain a list of important links to documents, websites and shared network folders using this option.
33. My Profile	Access to personal Profile
34. Edit Profile	Users can edit their personal profiles including cell phone/paging numbers and personal interests.
35. My Recommended Programs (based on "My Interests")	The web portal can automatically evaluate and recommend programs to a user based on his Job Title and personal interests defined in his Profile.
36. Upload My Picture	Users can also upload their thumbnail picture to be displayed in their profile.
37. User Communities	Administrator can create user communities and assign users. The users can then access to shared content uploaded to their user community.
38. Matched Keyword Highlighting	Search results would highlight the matching keywords for easier navigation.
39. Filtered Searches	Users can filter search results based on different criteria.
40. Sorted Search Results	Users can sort their search results based on relevance, program title, or other criteria.
41. Search via Tag	Users can also click on a program tag to display all programs matching that tag.



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General Functionality – Live VAKN Broadcasts	Description
42. TMS Integration	Full TMS integration. All live broadcasts can be joined from the TMS, there is single sign-on (pass through authentication), and TMS completions are recorded.
43. VAKN Learning Catalog Integration	Integration with the VAKN Learning Catalog in order to obtain program information (title, channel, start date, program length, etc.)
44. Channel Browsing	Users can go directly to a specific channel (Channel 1, Event Broadcast, etc.) to see what is on without having to search by title.
45. VAKN Channels Guide	Access to VAKN program listings for all channels.
46. Currently Running Programs with current progress	Users can quickly know which programs are currently playing on VAKN channels and how much they have progressed so far without actually playing back the channel.
47. Program Guide	A program guide with the current channel being played is displayed beside the video.
48. Upcoming Programs	In case no program is currently playing, channels menu will display the next upcoming program for user's convenience.
49. View Program Description/Rating	Users will be able to view description of a channel program by clicking on it in program guide. In case, the program is a repeat broadcast, users will also be able to view average "rating" of that program by earlier viewers.

## 2. CURRENT CDN SYSEM DESCRIPTION

CDN content is currently accessible to VA employees nation-wide on the VA Intranet at <http://vaww.vakncdn.lrn.va.gov>. This includes:

- All VA Medical Centers
- All VBA Regional Offices and Major Facilities
- Over 600 Community Based Outpatient Clinics (CBOCs) and Outpatient Clinics (PCs)
- Over 100 National Capital Area (NCA) Facilities
- Numerous VA Field Offices

CDN content is currently not accessible to:

- Anyone outside of the VA Intranet
- Employees connecting to the VA via Virtual Private Network (VPN)
- Very small VA facilities and field offices which are either unknown to the CDN team or do not sufficient bandwidth connectivity to piggy-back off the nearest major VA facility. Some example include Vet Centers, remote Veterans Health Administration (VHA)/VBA/NCA offices, and about one third (approximately 300) of the VA's CBOCs.



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- Facilities which utilize thin client. This is rare but does apply to some sites mainly in the VA's Veterans Integrated Service Networks (VISN) 23.
- Facilities or organizations with local policies that restrict CDN access. This is also rare but is known to occur at some VA facilities.

There are two types of videos distributed in the CDN network:

- a. Content On Demand – video files that can be viewed at any time. These files are typically education materials that are digitized from their native format (such as videocassette recorder (VCR) tape, compact disk – read only memory (CD-ROM) and other standard broadcast media) into a digital moving pictures expert group (MPEG) format.
- b. Live – live VAKN video programs generated from several sites within the VA enterprise or captured from commercial broadcast events as deemed appropriate by the VA. This live video is also digitized into an MPEG stream that is “multicast” (in essence, broadcast) to all authorized VAKN receivers located in the Veterans Health Administration (VHA). There are currently over 1,527 authorized satellite receivers at over five-hundred locations on the network.

A 2012 learning survey conducted by Employee Education System (EES) provided additional data concerning CDN availability and usage. The questions from the survey which were applicable to CDN and their responses are below:

- a. Responses to “Can staff access VAKN from their desktops using CDN?”
  - 95 % can
  - 5% cannot
- b. Responses to “What percentage of PCs are CDN capable?”
  - 93.11%
- c. Responses to “How many Non CDN capable PCs are because on thin client network?”
  - 20.00% Yes
  - 62.61% No
- d. Responses to the percentage of thin net users with access to CDN workstation?
  - 38.93%
- e. Responses to “If not CDN capable because of thin net, why?”:
  - 1.74% Management not to allow internet
  - 1.74% Management decision not to allow CDN access



- 21.74% Bandwidth or network limitation
- 5.22% PC's connected to network via VPN

### 2.1 **NETWORK ARCHITECTURE**

CDN's current hardware infrastructure is comprised of over 800 devices. This includes approximately:

- 250 Cisco routers, models 3745 and 3845
- 530 Cisco content engines, models Wide Area Application Engine (WAE)-611, 612, and 674
- 30 core platform devices (files servers, storage devices, network probes, etc.)

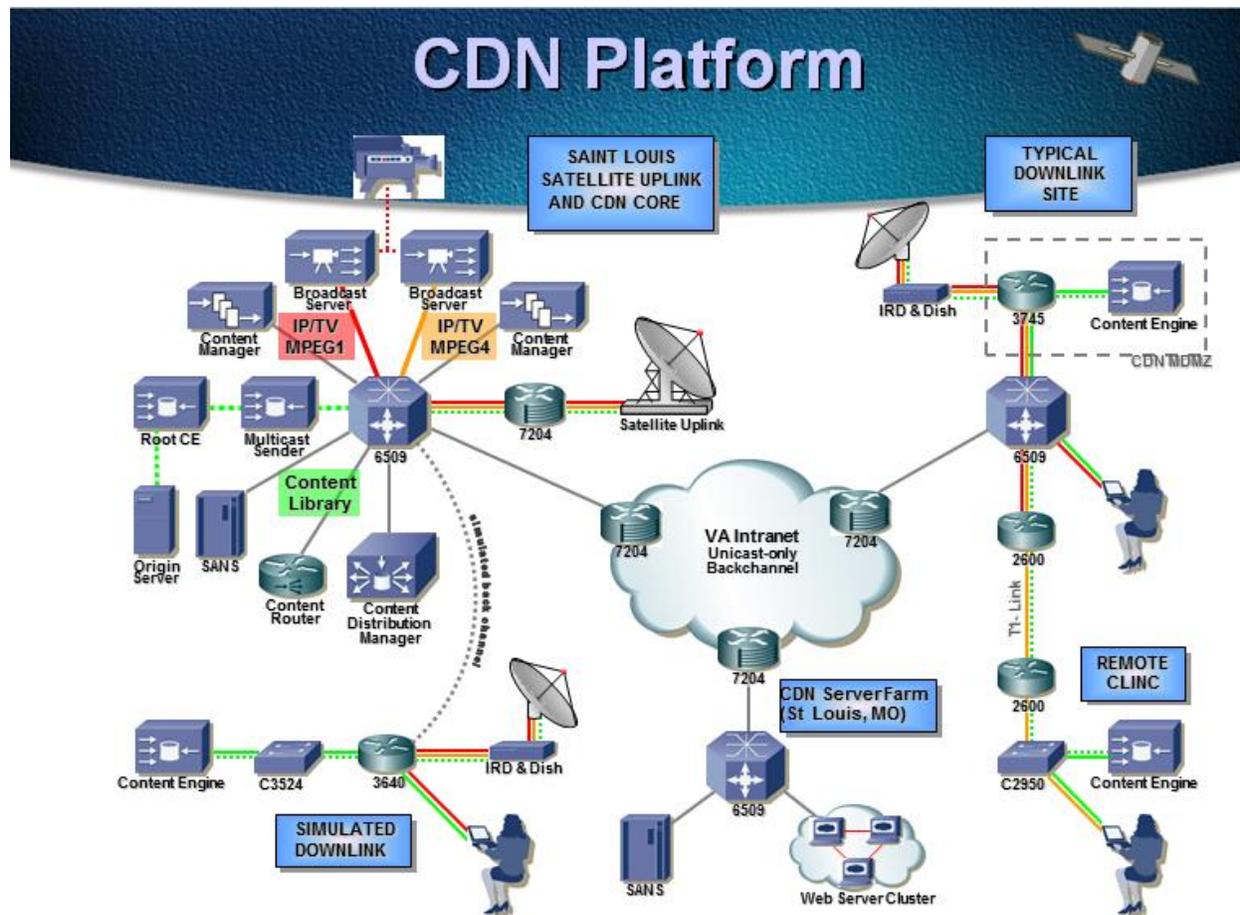
The most effective way to describe CDN's current network architecture is break the system down into its three primary components: the VAKN/CDN Uplink, the VAKN/CDN Downlink, and the CDN Server Farm as described below and represented in Figure 1.

- (1) VAKN/CDN Uplink. This component includes the VAKN satellite uplink and CDN core platform devices. This equipment is located at the St. Louis Uplink Facility, Building 48 of the St. Louis VA Medical Center, Jefferson Barracks campus.
  - The VAKN satellite uplink devices are located in VAKN Uplink Control, Room A129, on the main level of the building. The supporting satellite dishes and transmission equipment are outside of the building.
  - The CDN core platform devices are located in the CDN/EES Network Computer Room in the lower level of the building.
- (2) VAKN/CDN Downlink. This component is not a single location, but representative of approximately 410 separate downlink sites, all of which are similarly equipped and centrally managed. The VAKN/CDN unique equipment is installed at each downlink facility throughout the VA. Equipment at a "typical" Downlink site includes a digital downlink satellite dish, at least one digital satellite receiver (IRD), a CDN Router, and a CDN Content Engine (CE). Most downlink sites also have smaller "child" locations which they support with their satellite feed. These "child" locations are small VA facilities which do not require the satellite dish or IRD, but typically do have a CE and sometime a CDN Router also.
- (3) CDN Server Farm. This component is defined as the CDN Server Farm equipment used to support the CDN web site. The server farm is located in Bldg 48 of the St. Louis VA Medical Center (VAMC) in St. Louis and includes several Dell file servers, a SANS storage device, and a network probe.

The diagram below provides a graphical view of the overall CDN Platform/Network



Topology.



CDN Platform/Network Topology

## 2.2 DELIVERING LIVE VAKN BROADCASTS

In order to deliver live VAKN channel programming to users' desktops, the VAKN/CDN provides a unidirectional data channel to each remote site. These sites appear to be on a single broadcast network with the uplink router in St. Louis performing all the transmissions and the remote sites only being able to receive data. Both unicast and multicast routing protocols forward data on interfaces from which they have received routing control information. That model works only on bi-directional links. The problem is how to accomplish two-way communication over satellite links, which are unidirectional.

To be more specific, in unicast routing, when a router receives an update on an interface for a prefix, it forwards data for destinations that match that prefix out that same interface. This is the case in distance vector routing protocols.



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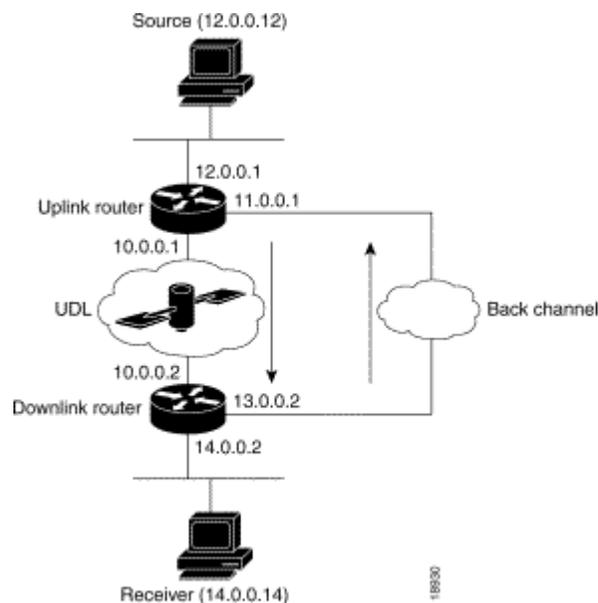
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Similarly, in IP multicast routing, when a router receives a “Join” for a multicast group on an interface, it forwards data destined for that group out that same interface. Based on these principles, existing unicast and multicast routing protocols cannot be supported over these unidirectional links.

CDN’s IP multicast routing solution utilizes Cisco software and implements the following protocols:

- Unidirectional Link Routing (UDLR) is a transport protocol which provides mechanisms for a router to emulate a bidirectional link to enable the routing of unicast and multicast packets over a physical unidirectional interface, such as a broadcast satellite link. The VAKN/CDN system’s adapted UDLR solution is to use IP multicast routing with IGMP (described below), which has been enhanced to accommodate UDLR.
- Internet Group Management Protocol (IGMP) is used between hosts on a LAN and the router(s) on that LAN to keep track of which multicast groups the hosts are members. This protocol is used to manage multicast traffic across the ports on a switch. Cisco’s Group Management Protocol (CGMP) can also be used where devices and IOS support CGMP.
- Protocol-Independent Multicast (PIM) is used between routers so the routers can track which multicast packets to forward to each other and to their directly connected LANs.
- Distance Vector Multicast Routing Protocol (DVMRP) is the protocol used on the MBONE (the multicast backbone of the Internet). The Cisco IOS software supports Protocol-Independent Multicast (PIM)-to-DVMRP interaction. DVMRP is used on legacy devices.
- Cisco Group Management Protocol (CGMP) is a protocol used on routers connected to Cisco Catalyst switches to perform tasks similar to those performed by IGMP.
- Cisco IP/TV live streaming (via IP multicast) is based upon local distribution and routed policy-based with the local LAN segments.

This solution scales very well for many satellite links and is the solution implemented today in the VAKN/CDN network. The figure below shows how it works. In the diagram, both the uplink and the Downlink routers are connected to each other by a back channel connection, the VA Intranet. Both routers have two IP addresses: one on the unidirectional link and one on the interface that leads to the back channel. The back channel is any return route and can have any number of routers.



*CDN Unidirectional Link Routing*

All routers on a unidirectional link must have the same subnet address. If this cannot be achieved, the upstream router must be configured with secondary addresses to match all the subnets that the downstream routers are attached to.

CDN is in the process of replacing its Cisco IP/TV broadcast servers with Digital Rapids Stream-Z servers. Although the current Cisco IP/TV Broadcast Servers are still functional, they are several years old and are at end-of-life. The Digital Rapids servers will utilize newer technologies for viewing both live and on-demand programming.

The VAKN satellite network is in the early stages of a migration from SD (Standard Definition) to HD (High Definition) for their video broadcasts.

### **2.3 DELIVERING CONTENT ON DEMAND**

In order to deliver Content on Demand (COD) video and audio to the users' desktop, CDN utilizes Cisco's ACNS management and distribution software. A Content Distribution Manager (CDM) is placed at the St Louis site where the content originates and a Wide Area Application Engine (WAE), also known as Content Engine (CE), is placed at each major VA facility requiring COD capability. As content is created it is imported into the CDM and then distributed to each site's CE. When a user makes a request for content the CDM determines the closest CE to the user making the request and redirects the request to the local CE. This way content is viewed on the local LAN at very high data rates even when the link to the central site is very small. Content distribution to the local LANs is controlled by time of day and the amount of bandwidth it

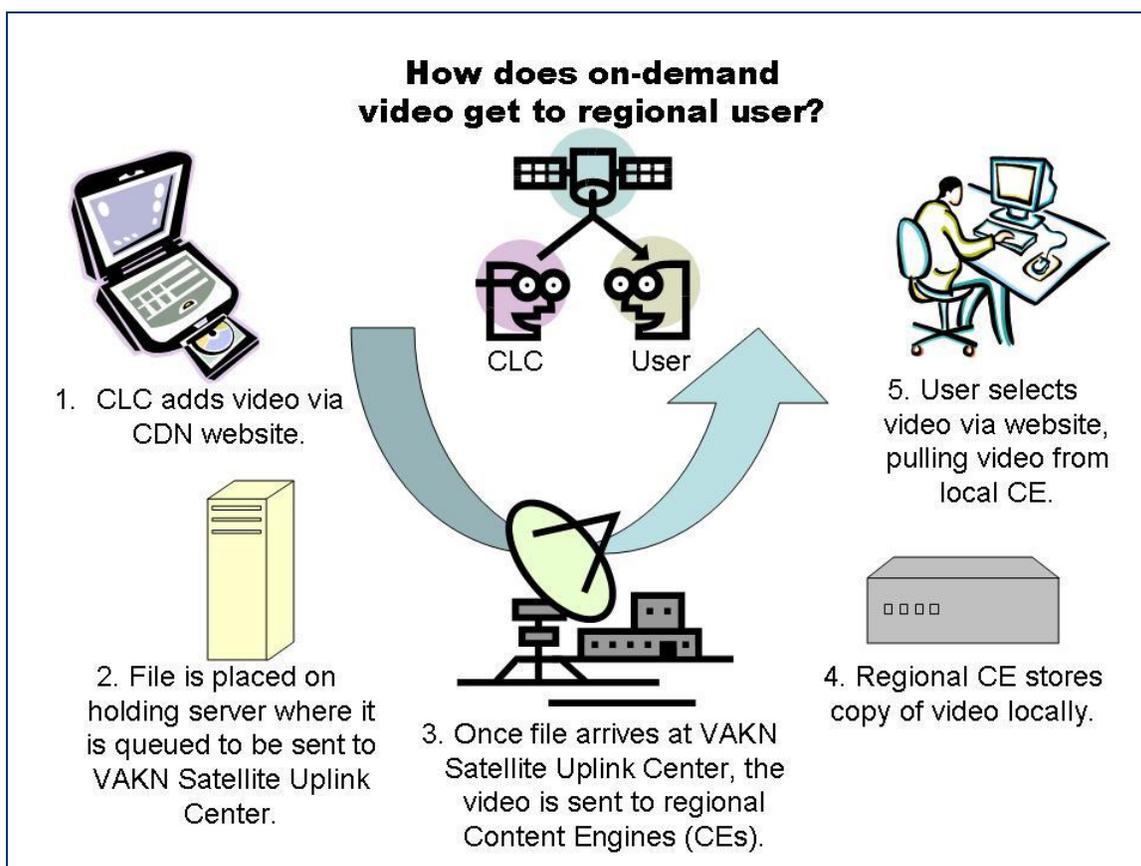


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uses to transmit across the VAKN satellite network. Typically large video files would be transferred during off-peak hours to avoid impacting production network use or live broadcasts.

Origin servers are placed as an origination point for on demand content. Once on an origin server, the Cisco platform acquires the content and then multicasts files over the satellite down to receiver / parent CE's across the VA. This pre-positioning of content is done in an intelligent manner and allows for bandwidth settings to be configured and scheduled. Content Routers are placed in the core platform in St. Louis to act as both DNS servers for CDN.VA.GOV and to redirect users based on tables to the appropriate content engine in the field. The http redirect process takes place to ensure that content is only streamed locally from one of the designated CE's to the user.

The technology behind CDN allows for the smart delivery of Content on Demand programs to users. The most important steps in adding new content happen in the background. The following diagram illustrates the process of distributing CDN video to users. The figure below depicts the flow of content throughout the CDN platform.



*CDN Content on Demand Flow Process*



## 2.4 ACCESSING CDN VIDEOS – VIA THE VA INTRANET

Most VA employees access CDN videos from a VA network connection either via the CDN Web Portal at <http://vaww.vakncdn.lrn.va.gov> , or VA’s Talent Management System (TMS) at <https://www.tms.va.gov/> as described below. In a few cases, direct CDN launch strings are embedded in other VA web sites.

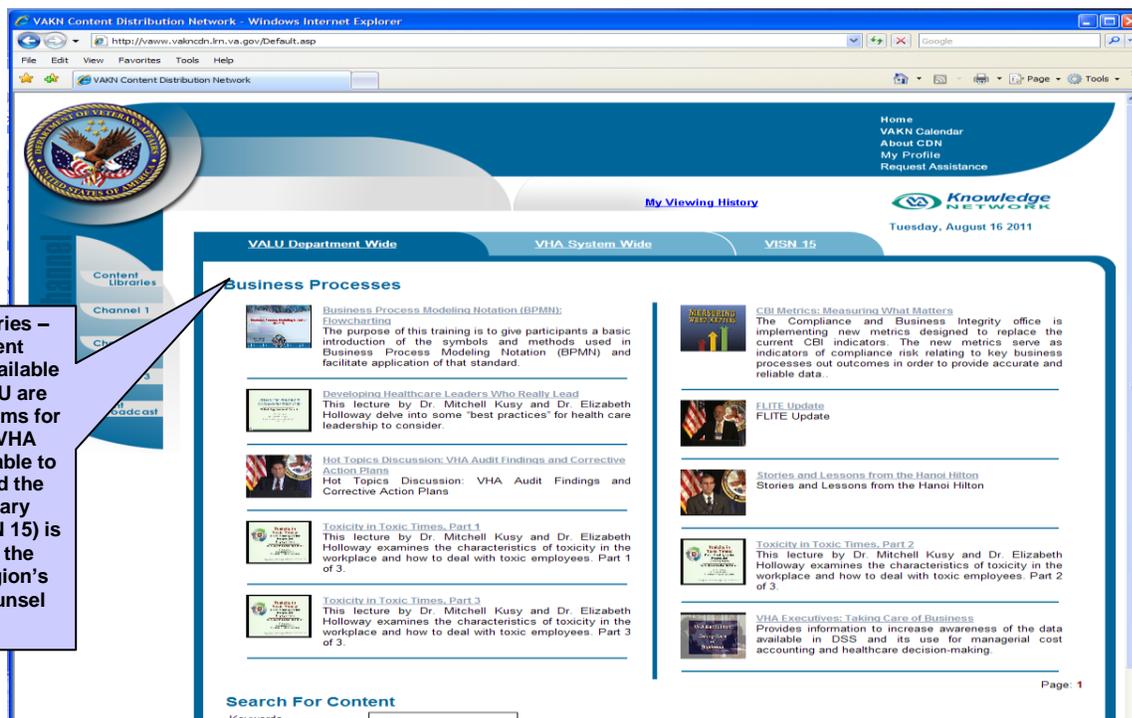
- a. The **CDN web application** is a custom application that was developed in house over a number of years and owned by the VA. It is hosted on a Windows Server platform and utilizes MS SQL as a database. The CDN web application meets Section 508 standards. Screen captures of the major sections of the CDN web portal are shown below:

The screenshot shows the VAKN Content Distribution Network (CDN) Home Page in a Windows Internet Explorer browser window. The address bar shows the URL <http://vaww.vakncdn.lrn.va.gov/Default.asp>. The page features a blue header with navigation links: Home, VAKN Calendar, About CDN, My Profile, and Request Assistance. A personalized welcome message reads "Welcome, Richard Tremblay" with a link to "My Viewing History". The main content area includes a "Welcome to the Content Distribution Network (CDN)" section with a video link "Two Minutes - CDN Introductory Video". Below this is a "Frequently Viewed Programs" section featuring "ADVANCE: Transforming Potential Into Performance" and "Announcing HCEI". To the right is a "Latest News" section with "VA News" and "Diversity News". A "Knowledge NETWORK" logo and the date "Tuesday, August 16 2011" are also visible. Three callout boxes provide additional context: one on the left notes the site is hosted from a CDN Server Farm at the NSOC Hines Data Center; a central one explains the personal welcome message; and one on the right points to navigation links for supporting information, FAQs, and program schedules.

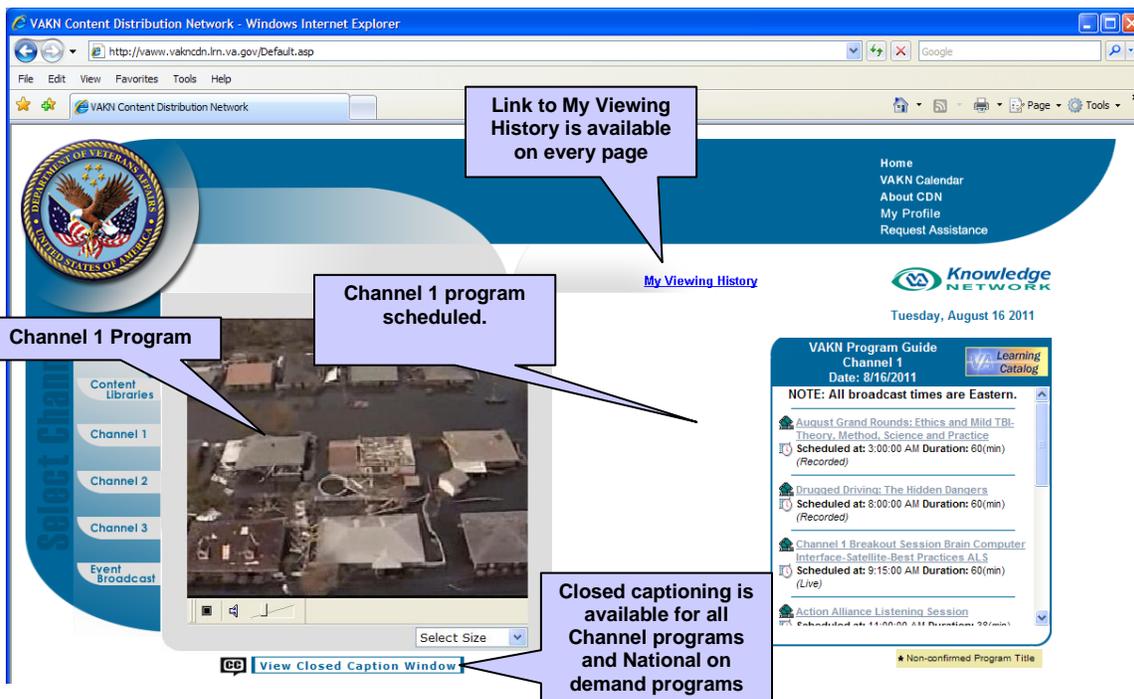
Screen Capture 1: CDN Home Page



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Screen Capture 2: "Content on Demand" from a CDN Content Library



Screen Capture 3: A VAKN Channel Broadcast



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In addition to the user interface, the CDN web application also has an administrative interface for network administration, submission of videos, and generating usage statistics reports. The screen captures below show examples of two of the many types of usage reports that are available to authorized administrators. Clicking on the “Completed” tab in the first “Library Program Usage” screen shot provides a list of who has viewed the program as shown in the second “Visitor Reports” screen shot.

### Library Programs

The Library Programs report allows you to locate data associated with the programs available in the CDN Content Libraries. The generated reports show information that has been tracked or recorded for each program. Enter your search criteria using the form below and click the “Generate Report” button. Clicking the “Reset” button will clear all of your form entries. You can find more information about how to use the report criteria tool here.

Specify Report Criteria	
Choose Duration	<input checked="" type="radio"/> To Date <input type="radio"/> Last: <input type="text"/> days <input type="radio"/> From: <input type="text"/> (mm/dd/yyyy) To: <input type="text"/> (mm/dd/yyyy)
Choose Program	Library: <input type="text"/> All              Category: <input type="text"/> All              Program Title: <input type="text"/>
Choose Location	Administration: <input type="text"/> ALL              Region: <input type="text"/> -- Select One --              Facility: <input type="text"/> -- Select One --
Customized Viewing Options	<input checked="" type="checkbox"/> Program Title <input checked="" type="checkbox"/> Library <input checked="" type="checkbox"/> Category <input checked="" type="checkbox"/> Program Length <input checked="" type="checkbox"/> Visits <input checked="" type="checkbox"/> Played <input checked="" type="checkbox"/> Program Information <input type="checkbox"/> Schedule Availability <input type="checkbox"/> Administration <input type="checkbox"/> Region <input type="checkbox"/> Facility
<input type="button" value="Generate Report"/> <input type="button" value="Reset"/> Records Per Page: <input type="text"/> 20	

### Usage Report :

Reporting Period : To Date    Program Detail : All    Program Title :    Location : All

#	Program Title	Library	Category	Program Length	Visits	Played	Program Information
01	American Veteran 3 - My HealtheVet	VALU Department Wide	Customer Relations	04:12	2	0	
02	American Veteran 3 - My HealtheVet	VALU Department Wide	Customer Relations	04:12	2	0	
03	American Veteran 3 - Operation Homecoming	VALU Department Wide	Customer Relations	01:56	1	0	
04	HPDM Works for You	VHA System Wide	HR and Staff Development	10:00	1	0	
05	HPDM Works for You	VHA System Wide	HR and Staff Development	10:00	1	0	
<b>TOTAL:</b>					<b>7</b>	<b>0</b>	

Library Programs Usage

### Visitor Report

The visitor report allows you to locate visitors, or users, of the CDN website. Enter your search criteria using the form below and click the “Generate Report” button. Clicking the “Reset” button will clear all of your form entries. You can find more information about how to use the report criteria tool here.

Specify Report Criteria	
Choose Duration	<input checked="" type="radio"/> To Date <input type="radio"/> Last: <input type="text"/> days <input type="radio"/> From: <input type="text"/> (mm/dd/yyyy) To: <input type="text"/> (mm/dd/yyyy)
Visitor Details	Last Name : <input type="text"/> First Name : <input type="text"/> OR User ID: <input type="text"/>
Choose Location	Administration: <input type="text"/> All              Region: <input type="text"/> -- Select One --              Facility: <input type="text"/> -- Select One --
Customized Viewing Options	<input checked="" type="checkbox"/> Registered Visitor <input checked="" type="checkbox"/> Administration <input checked="" type="checkbox"/> Region <input checked="" type="checkbox"/> Facility <input checked="" type="checkbox"/> Channel Visits <input checked="" type="checkbox"/> Library Visits <input checked="" type="checkbox"/> Total Visits <input checked="" type="checkbox"/> Total Played <input checked="" type="checkbox"/> Visitor Information <input type="checkbox"/> User ID <input type="checkbox"/> Job Department <input type="checkbox"/> Anonymous User
<input type="button" value="Generate Report"/> <input type="button" value="Reset"/> Records Per Page: <input type="text"/> 20	

### Usage Report :

Reporting Period: To Date    Location : All

#	Registered Visitor	Administration	Region	Facility	Channel Visits	Library Visits	Total Visits	Total Played	Visitor Information
1	Howard, Ann	VHA	VISN 08	Miami	0	0	0	0	
2	Noltmier, Carol	VHA	VISN 12	Backbone	9	3	12	0	
3	Davis, Craig	VHA	VPN Users	VPN Users	6	1	7	0	
<b>TOTAL:</b>					<b>15</b>	<b>4</b>	<b>19</b>	<b>0</b>	

Visitor Reports



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- b. The **TMS** is the official site of record for all VA training. It is a COTS software product and does not host CDN videos, just metadata about the video and links to them. When someone clicks on a CDN video they want to watch in TMS, they are redirected to the CDN system to play the video. Screen captures of the TMS home page and a simple content structure containing a link to CDN video are shown below:

The screenshot displays the TMS home page for user RICHARD C TREMBLAY. The page features a navigation menu with options: Home, My Employees, Organization, and Admin. The user profile identifies RICHARD C TREMBLAY as an IT PROJECT MANAGER / IT PROJECT MANAGER and IT EES STAFF. The main content area is divided into two columns. The left column, titled 'To-Do List', shows a list of training courses categorized by due date. The right column, titled 'Easy Links', provides quick access to various system features and resources.

Due later	No due date
5/28/2013 VA Privacy and Information Security Awareness and Rules ... Available	2009/2010 Mandatory OGC Ethics In progress
7/16/2013 Prevention of Workplace Harassment/No FEAR In progress	Clinical Nurse Leader: Principles and Practice Available
9/28/2013 VA Online Travel Card Training Available	Effective Oxygen System Management: Bulk Oxygen Fill Pr... In progress
	Ethics Most Wanted In progress
	FEMP 1st Thursday Series: Achieving Energy Security in F... In progress
	IFRS: Standards for Financial Statements and Their Items In progress
	Mid Level FAC-P/PM Boot Camp In progress
	TMS Video Test In progress

Easy Links	
ADVANCE	Reports
Approvals	Start a Self Assessment
FSAFEDS	TMS Help Desk
Inside TMS	USA Jobs
MyCareer@VA	VA Home Page
News	VA Learning University
Options and Settings	VA Mandatory Training Info
Record Learning	VAKN Calendar

Curricula	Completed Work
Overdue (0)	No completions in the last 30 days.
Due in 30 days (0)	
Due Later (3)	

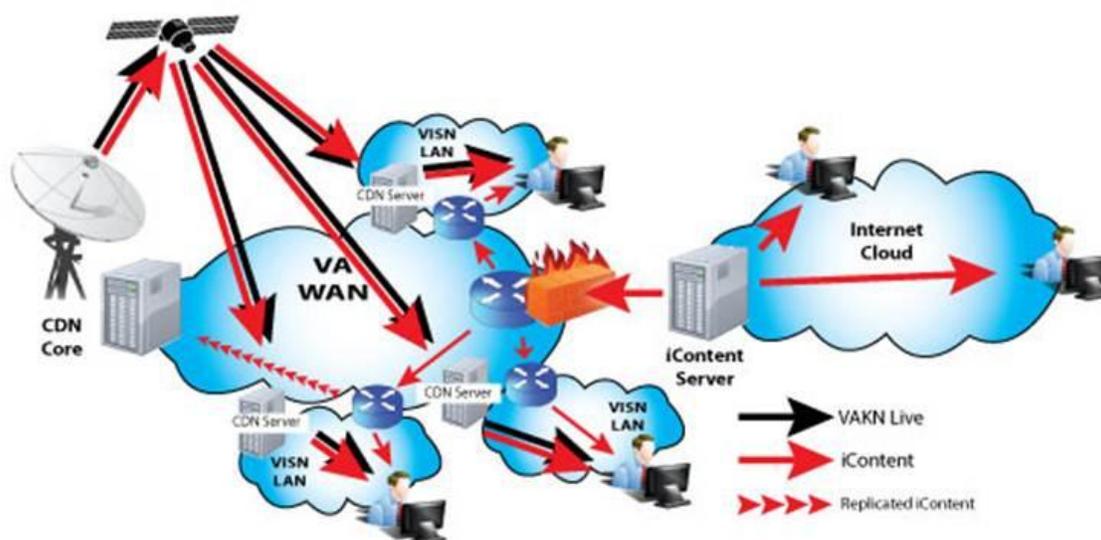
Competencies	Communities
0% of requirements met	See what's happening in the forums



## Content Delivery Network Next Generation Solution

### 2.5 ACCESSING CDN VIDEOS – VIA THE PUBLIC INTERNET

The ability of VA employees to access CDN videos from the public internet, such as from home, is very limited at this time. The VA has begun using an iContent server outside of the VA to provide this capability as shown in the diagram below.





## Content Delivery Network Next Generation Solution

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Because CDN is not accessible outside of the VA and iContent is not fully accessible within the VA, the video must be hosted on both systems. This is accomplished via the TMS. A single content item is listed in the TMS system for the video title. Once it is selected, the user is given options and must pick the appropriate version depending on whether they are accessing it from a VA facility or from outside the VA network.

### **3. RESPONSE REQUIREMENTS**

In response to this RFI, VA is looking for viable sources to provide the above requirement. It is requested that interested contractors submit a response (electronic submission) of no more than 25 pages in length, single spaced, 12 point font minimum that addresses the above information. All responses shall be submitted no later than 12:00PM EST (noon) on Friday, February 15, 2013 to Candice Capelli at [Candice.Capelli@va.gov](mailto:Candice.Capelli@va.gov). Any questions related to this RFI shall be submitted to Candice Capelli at [Candice.Capelli@va.gov](mailto:Candice.Capelli@va.gov) or at 732-578-5450 no later than Friday, February 8, 2013 at 12:00PM EST (noon).